

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P391014

Luminaire Tested: **24CZ2-120VHE-RDP-UNV-L950-CD2-SDWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P391014
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-120VHE-RDP-UNV-L950-CD2-SDWPD1-U
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7265.4 lumens
Efficiency: N/A
Efficacy: 86.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

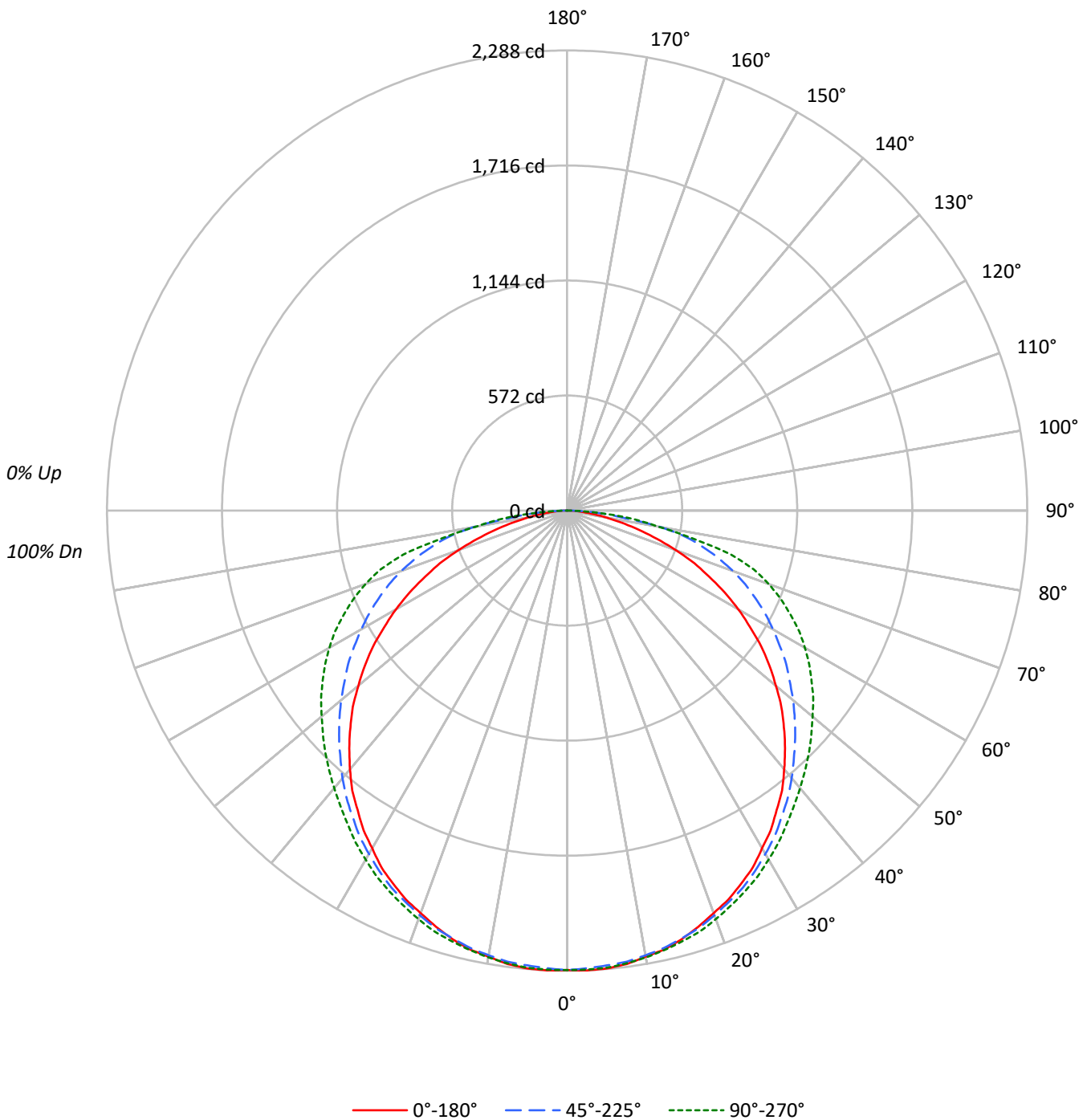
Input Watts (W): 83.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82					82			
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67					67			
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56					56			
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47					47			
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40					40			
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35					35			
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31					31			
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27					27			
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24					24			
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22					22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3074	3074	3074
5°	3086	3066	3081
10°	3077	3067	3082
15°	3072	3067	3087
20°	3050	3065	3096
25°	3039	3071	3103
30°	3012	3063	3113
35°	2983	3054	3125
40°	2950	3051	3165
45°	2901	3052	3237
50°	2836	3070	3334
55°	2764	3119	3483
60°	2647	3181	3675
65°	2478	3293	3901
70°	2254	3445	4196
75°	1911	3634	4384
80°	1508	3658	3546
85°	1113	2782	3115



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.7	3.0
10°-20°	623.7	8.6
20°-30°	953.8	13.1
30°-40°	1166.1	16.0
40°-50°	1242.8	17.1
50°-60°	1188.3	16.4
60°-70°	1006.6	13.9
70°-80°	676.5	9.3
80°-90°	190.8	2.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1794.3	24.7
0°-40°	2960.4	40.7
0°-60°	5391.4	74.2
0°-90°	7265.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7265.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2285	2285	2285	2285	2285	
5°	2285	2281	2270	2281	2281	217
15°	2206	2206	2202	2220	2216	622
25°	2047	2054	2068	2087	2090	943
35°	1816	1831	1860	1896	1903	1138
45°	1524	1550	1604	1672	1701	1176
55°	1178	1222	1330	1434	1485	1050
65°	778	858	1034	1171	1225	773
75°	368	501	699	818	843	394
85°	72	148	180	195	202	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2284.8	2284.8	2284.8	2284.8	2284.8
2.5°	2288.4	2288.4	2277.6	2284.8	2284.8
5°	2284.8	2281.2	2270.3	2281.2	2281.2
7.5°	2273.9	2270.3	2263.1	2273.9	2270.3
10°	2252.3	2252.3	2245.1	2255.9	2255.9
12.5°	2234.3	2230.7	2227.1	2241.5	2237.9
15°	2205.5	2205.5	2201.9	2219.9	2216.3
17.5°	2169.4	2173.0	2176.6	2191.1	2194.7
20°	2129.8	2137.0	2140.6	2162.2	2162.2
22.5°	2093.8	2097.4	2104.6	2126.2	2126.2
25°	2046.9	2054.1	2068.5	2086.6	2090.2
27.5°	2000.1	2003.7	2021.7	2046.9	2050.5
30°	1938.8	1949.6	1971.2	2000.1	2003.7
32.5°	1884.7	1895.6	1920.8	1949.6	1956.8
35°	1816.3	1830.7	1859.5	1895.6	1902.8
37.5°	1755.0	1765.8	1801.9	1841.5	1852.3
40°	1679.3	1701.0	1737.0	1783.8	1801.9
42.5°	1603.7	1625.3	1668.5	1729.8	1751.4
45°	1524.4	1549.6	1603.7	1672.1	1701.0
47.5°	1445.1	1473.9	1535.2	1614.5	1646.9
50°	1355.0	1391.0	1466.7	1556.8	1592.8
52.5°	1268.5	1311.8	1394.6	1495.5	1542.4
55°	1178.4	1221.7	1329.8	1434.3	1484.7
57.5°	1077.5	1135.2	1254.1	1373.0	1427.1
60°	983.8	1037.9	1182.0	1311.8	1365.8
62.5°	882.9	955.0	1109.9	1246.9	1300.9
65°	778.4	857.7	1034.3	1171.2	1225.3
67.5°	684.7	771.2	958.6	1095.5	1149.6
70°	573.0	681.1	875.7	1012.6	1066.7
72.5°	468.5	587.4	789.2	922.6	973.0
75°	367.6	500.9	699.1	818.0	843.3
77.5°	273.9	414.4	605.4	655.9	637.9
80°	194.6	331.5	472.1	446.9	457.7
82.5°	126.1	252.3	291.9	331.5	342.4
85°	72.1	147.8	180.2	194.6	201.8
87.5°	32.4	54.1	72.1	72.1	68.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)